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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,447	02/15/2002	Stefan Kotter	00-1-242	3138

7590 04/22/2004  
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EXAMINER

KEANEY, ELIZABETH MARIE

ART UNIT	PAPER NUMBER
2882	

DATE MAILED: 04/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/077,447

**Applicant(s)**KOTTER ET AL. **Examiner**

Elizabeth Keaney

**Art Unit**

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2003.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-9 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 15 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

Receipt is acknowledged of the Amendment and Remarks filed 24 December 2003.

#### ***Response to Arguments***

Applicant's arguments with respect to claims 1-3 and 7-9 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments with respect to claims 1 and 4-6 have been fully considered but they are not persuasive.

The Applicant argues that Lapatovich (US Patent 6,566,817) does not teach a specific fill pressure associated with either a quartz or ceramic discharge envelope and therefore the range disclosed does not constitute a teaching for the instant invention.

The Examiner respectfully disagrees. Lapatovich discloses discharge envelope materials including quartz and ceramic and further discloses cold fill gas pressures for the discharge lamps in the range of 1 torr to 10 atmospheres (.01-10.31 bar). One of ordinary skill in the art would recognize the teaching of the cold fill gas pressures is drawn to both embodiments of the discharge envelope. Further, a discharge lamp comprising a ceramic envelope being filled with a buffer gas to a pressure of at least 5 barr is known in the art, as will be further taught by Hendricx et al. (US Patent 6,404,129; hereinafter Hendricx) as follows.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-3 and 7-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Hendricx.

Re claim 1: Hendricx discloses, in figure 2 and throughout the disclosure, a ceramic arc tube (column 3, line 60) comprising:

- a discharge vessel (3) having at least one capillary (35) having an electrode assembly (5),
  - the capillary extending outwardly from the discharge vessel to a distal capillary end,

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- the electrode assembly being hermetically sealed to the distal capillary end with a frit material (10; column 4, lines 4-5),
- the electrode assembly (5) passing through the capillary (35) to the discharge chamber (11) and being connectable to an external source of electrical power (9),
- the discharge vessel (3) enclosing a discharge chamber (11) containing a buffer gas and an ionizable fill material, wherein the pressure of the buffer gas being at least 5 bar (column 4, line 26).

Re claims 2 and 9: Hendricx discloses the buffer gas pressure being from 5 bar to 10 bar (column 4, line 26).

Re claim 3: Hendricx discloses the buffer gas pressure exceeds 10 bar (column 3, line 41).

Re claims 7 and 8: Hendricx discloses the buffer gas being xenon (column 4, line 25).

Claims 1 and 4-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Lapatovich.

Re claim 1: Lapatovich discloses, in figure 8 and throughout the disclosure, a ceramic arc tube comprising:

- a discharge vessel (40) having at least one capillary (48) having an electrode assembly (42),
  - the capillary extending outwardly from the discharge vessel to a distal capillary end,
- the electrode assembly being hermetically sealed to the distal capillary end with a frit material (50; column 3, line 17),
- the electrode assembly (42) passing through the capillary (48) to the discharge chamber and being connectable to an external source of electrical power (20),
- the discharge vessel enclosing a discharge chamber containing a buffer gas and an ionizable fill material (column 3, lines 26-40), the pressure of the buffer gas being at least 5 bar (column 3, lines 55-56).

Re claim 4: Lapatovich discloses the discharge vessel is comprised of a sapphire tube (column 3, line 10) and the capillary is comprised of a polycrystalline alumina (column 3, line 15).

Re claim 5: Lapatovich discloses the capillary is part of an end cap which has been hermetically sealed to the sapphire tube (column 3, line 17).

Re claim 6: Lapatovich discloses, in figure 8 and throughout the disclosure, the end cap having an annular rim (44) which fits over an open end of the sapphire tube.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Keaney whose telephone number is (571)272-2489. The examiner can normally be reached on Monday-Thursday 5:30-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571)272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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DAVID V. BRUCE  
PRIMARY EXAMINER